US PTO Customer No. 25280 Case No. 5662

ABSTRACT

The use of organic based nucleating agents to induce certain specific polymer orientations into the molded polypropylene articles such that the resultant part has improved stiffness-impact properties without sacrificing other attributes of the polypropylene is provided. Such results have been obtained through the utilization of low amount of organic nucleating compounds, including, without limitation, specific metal salts of hexahydrophthalic acid (hereinafter HHPA). Furthermore, such nucleating compounds have been found to impart, again in such low added amounts, heretofore unforeseen levels of b-axis crystalline orientation which translates into improved physical properties as well.